Exaerete lucida Enichs. 1848 ist $=$ Englossa frontalis Guér. 1845 (Chrysantheda frontalis Sm.), muss also heissen: Exierete frontalis Guuér.

Fxaerete murata Erichs. 1848 ist $=$ Englossa smaragdina Guér. 1845 ( Chrysantheda smaragdina Sm.), muss also heisseu: Exacrete smaragdina Ginćr.

Die übrigeu Species dieses Genus heisseu also: Exaerrte den'ata L., vitida l'erly, subcormuta Rom. und trochanterica lriese.

# Descriptions of New lieneria and Species of Hymenoptera from India. 

By P. Cameron. (Continued.)

The colouration is metallic blue, marked with white; the head is obliquely narrowed behind the eyes; the occiput is margined; the gastrocoeli and the base of the 2nd segment are stoutly striated; the apical (7th) segment is large and bluntly pointed; the ventral keel extends to the 6th segment; the eyes are large and parallel.
'The relationship of this genus is clearly with Laveiga; the differences between the two may be expressed thus:

- Areola not much longer than broad; its sides roundly curved; two distinct lateral areae; the apieal much longer than the basal ; the recurrent nervure without a nervelet. - Lareiga.
- Areolet twice longer than broad, its sides straight ; two indistinct lateral areae, of almost equal size ; the recurrent nervure with a long nervelet. - Udontojoppa.

0. metallica II. sp. $\sigma^{7}$ Nigra, abdomine coeruleo, alloUnlineato; tiliirs basique tarsorum' late allis; alis fuscis, stigmate nervisque fuscis. - Long.: 16 mm .

Hab . Khasia (Coll. Rothuey).
Antenuac fuscous, paler before the middle. The face, clypens, labrom, middle of maudibles, the imner orbits and the outer on the lowerside, yellow. Face and clypeus uniformly punctured and thickly covered with short white pubescence; the clypens foveate at the sides and not separated from the face. Thorax shining, very sparsely and mivutely punctured and thickly covered with short fuscons pubescence. Sentellum shining, smooth and covered with long fuscous hair. The areola is smooth, except for a lougitudinal keel in the middle
at the apex; the base depressed, rongh; it is louger than broad and is transverse at the apex; the posterior median smooth, at the most acienlated iu the middle; its sides with some short, trausverse keels; the posterior outer areae have a few stout, irregular keels on the outerside of varying length; the onter basal areac have some keels on the outerside; the spiracular area is stontly transversely striated beyond the spiracles. The pro- and mesoplemae are shining and covered with shallow punctures; the pre-striated in the moddle at the apex; the metaplenate are sparsely punctured and of a more bluish tint than the meso- or proplenrae. The 4 anterior tarsi, the base of the tibiae broadly aud the tarsi, testaceons; the femora fuscons, the tarsi are ammlated with fuscous; the hinder enxae, trochanters and fomora dark blue; the tibiae blackish, broally testaceons at the base; the tarsi are testaceons, anuulated with black. Wiags fuseous-hyaline, the stigma and nervures testaceous, the areolet uarrowed at the top, being there not the length of the space bounded by the recurrent and the transverse eubital werrures. Abdomen shining, bright blue, the petiole darker; its apex and the apex of the 2nd segment wore broadly at the sides, but more narrowly in the middle, yellowish-white; the gastrocoeli stoutly longitudiually striated, except at the apex which is smooth and brownish.

## 9. Gurfyia, gem. nov.

Sentellum flat; ; its sides with elevated stont keels to near the apex. Median segment with a wide deep depressiou at the base; the areola wider than long, its base ronuded, fully half the wilth of the apex, which is almust transverse; the keel at its base is not much raised. Apex of elypeus transverse. Labrum hidden. Maudibles with two large teeth, the upper being the larger. Legs of moderate length; the frout tarsi spined on all the joints. Areolet 5 -angled, narrowed on the top; the trausverse basal nervure is interstitial. The petiole becomes gradually widened from the base to the apex, the post-petiole not being elearly separated. Gastrocoelishallow. There are 7 abdominal segments; the last is blontly pointed and is as long as the 6 th; the ventral keel is distinet on the $2^{n d}$ and 3ra segments, broader and less distinct on the $4^{\text {th. }}$.

The face and clypens are flat; the temples are broad; the occiput is incised; the antennae are not serrated towards the apex in the male; the apex of the hinder femora does not reach to the apex of the 3rd segment; there is no stmmp of a nervure on the disco-cubital nor on the recurrent nervire.

The strongly keeled seutellum of this geuns reminds one
of Eiurylutis; but the form of the abdominal petiole is different from what it is in that genus. The blnut apex of the abdomen and the ventral keel being only on the 2 ud and $3^{\text {rd }}$ segments would place the genus in the Amblypygi. The females I donot know.
G. albipilosa sp. not. © Nigra, abdomine coeruleo, facie clypeoque flavis; tibiis posticis muis; alis hyalinis, nervis et stigmate nigris, - Long.: 10 mm .

H ab. Simla.
Antenuae stout, tapering towards the apex; as long as the body; black, the scape yellow below. Head thickly covered with white pubesceuce, wich is lougest ou the front and vertex; black; the face, clypeus and base of the mandibles yellow; the vertex sparsely, the frout more closely and strougly punctured; the labrum is fringed with long pale fulvous hair. Mandibles black, yellow at the base. Palpi palc yellow. Thorax black, the edge of the pronotum yellow behind; there are 2 small yellow marks on the apex of the scutellom. Mesonotum punctured, but not very closely; the scutellum is more sparsely punctured. P'ostscutellum minately punctured. The basal areae of the median segment are closely and rather strongly punctured; the areola is widely furrowed down the sides; its centre is stoutly longitudinally striated; it is opeu behiud. The posterior median area is closely and somewhat strongly transversely striated and is roundly dilated into the areola above; the lateral areae are more stontly transversely striated. Pleurae closely puactured; the meta- more strongly than the rest; the meso- less strongly below than above. The 4 anterior femora, tibiae and tarsi are yellow in front; the front coxae and trochanters are yellow below, the middle yellow in the centre; the hinder tiblae are rufous, their calcaria of a paler rufous colour. Abdomen dark blue, with a purplish tinge; the petiole is darker in colour. Petiole striated; its sides keeled; the post-petiole is distiuctly separated, raised in the ceintre, irregularly puactured and longitudinally striated; the apex in the middle is smooth and shining. Gastrocoeli elongate, wide, striated at the base.

## 10. Amblyjoppa.

1. A. I'ulipes. sp. nov. Q Nigra, abdomine ferrngineo, apice nigro; capite thoraceque late flaro-mactulais; pedibns rutis, coxis trochanteribusque unterioribus thavis, alis fusco-violuceis. - Long. : 22-23 mm. (Coll. Rothney).

Antemae stont, black, the $8^{\text {th }}$ to 15 th joints white below and thickly covered with a fine pile; the scape puuctured.

Head black, the face, clypeus, lahrum, inner eye orbits to the end of the eyes on the top, and the outer orbits broadly from below the middle, black. Face and elypeus strougly, but not elosely punctured aud covered with short, white pubescence; the middle of the face and vertex irregularly shagreened. Thorax black; the edge of the pronotum from uear the base, two, slightly obliqne, short marks on the midille of the mesonotum, the sentellum, except at the cupex, 2 marks on the apieal slope of the median segments, the tubereles, the nuder half of the mesopleurae, wilely, triangularly incised above; and a couical mark on the middle of the metapleurae, yellow. Mesonotum alutaccons at the sides, the middle distinctly punetured; the scutellum more strongly puuctured than it. Median segment opaque, closely rugose; the areola is twice longer than broad, the apical haif distinctly wider than the basal; its apical keel ohsolete; its base and sides foveate; the posterior median area is coarsely and deeply retienlated; the lateral areae in the middle are closely, irregularly trausversely striated; the posterior median becomes gradually wider towards the apex ; the spiracular beyoud the spiracles is eoarsely striated. Mesoplenrae, except in the middle, closely punctured; the upper part of the apical furrow is striated. Metapleurae more closely and strongly punctured; the base bears some striae and there is a close row of striations above the lower keel. Legs ferruginous; the 4 anterior coxae and trochanters pale yellow ; the hinder trochanters slightly infuseated. Wings uniformely fuscous-violaceous; the stigma anduervires blackish; the areolet at the top is as wide as the space bounded by the recurrent and the 2 nd transverse cubital nervures; the recurreut is received shortly, but distinctly, beyond the middle. Abdomeu ferruginous, the apical 4 segments black; the petiole is strongly keeled on the sides above and closely transversely striated; the post-petiole, in the middle, closely, irregularly longitudiually reticulated; its sides sparsely punctured; its ventral surface is closely and siontly transversely striated. Gastrocoeli smooth; the space between them sharply, longitudiually striated.
2. A. fuscipeninis, sp. nor. o'Q Nigra, capite thoracoque allomaculutis; pedibus mifis, tarsis fere fulvo-fluris ; ulis tuscis. - Long. 21-22 mm. H a b. Khasia Hills, Assam. (Coll. Rothney).
Antemae black: the $8^{\text {th }}$ to $18^{\text {th }}$ joints white beneath; the scape closely punctured, thickly covered with short fuscous hair, the flagellum with a fuscons dowu. Face and elypens white, strongly punctured; a narrow black line rums down from the antenuae to the middle of the face, where it becomes
joined to one more than twice its brealth, which exteuds to the base of the elypens; there is a uarrower band continuons with it in the centre of the clypeus. Maudibles black, broadly yellow in the middle at the hase; palpi lemon-yellow. Front roughly almost transversely striated; vertex smooth; there is a furrow between the ocelli. The inner orbits are sharply margined, are bordered with yellow, narrowly below, more broadly above; the upper band is slightly narrowed in the middle. Thorax black; the prothorax broadly in front, the edge of the pronotum broadly; the tubercles (which are large), two short lines on the hase of the mesonotrim in the centre, the sides of the scutellnm broadly, an oblique mark on the lower part of the mesopleurae, before the keel, a large irregular one on the middle of the lower part, extending on to the sternum, lemon-yellow. Mesovotnm strongly punctured, thickly covered with short fuscons hair ; the parapsidal furrows are deep, wide, obscurely striated in frout: the hinder edge from the tegulae to the sides of the scutellum stontly and sharply keeled; inside of this is a cremulated furrow. Scutellum covered with loug fuseous hair; the black central part strongly, the sides sparsely punctured; the post-seutellum is very smooth; its sides at the base depressed, hordered on the outerside by a stont keel. The depression at the base of the median segment is wide, deep and smooth, as is also the hase in the centre; the rest of the segment rugose, running into reticnlations and striations; the areola is broally rounded at the top; it is as broad as long and is roundly eurved inwardly; the posterior median area strongly trausversely striated; the posterior intermedian areae coarsely retienlated; the rest of the segment rugose, ruming into retienlations and striations. Propleurae punctured: the top behind the mildle with a stont keel; the hollow in the middle above smooth; on the lower part broadly stoutly obliquely striolated, the striations becoming stouter towards the apex. Mesopleurae strongly punctured, the apex depressed, cremulated. Metapleurae coarsely punctured and with a deep, wide crenulated furrow down the middle. The spiracular area is closely and strongly punctured at the hase. The base of the wings has a more yellowish tiut than the apex: the areolet is almost triangular. The $f$ anterior cosae and trochanters are yellow : the anterior coxae are black at the base behind: the anterior femora and tibiae broadly, the hinder coxae broadly behind and the trochanters black; the tarsi infuseaten, thickly covered with fulvous hair. Abdomen black, shiniug and with a faint violaceons tiuge.

A common species. It differs from the other species of the genus in the abdomen not being banded with red.

## 11. Lachmetha gen. nor.

Q. Abdomen with 8 dorsal segments. Antennae thickened and dilated beyond the middle. Mandibles with a long apical and a much shorter triangular lower tooth, which is bent inwardly and downwards. Apex of clypens transverse: the labrum projecting. its apex ronnded and separated from the sides. Sentellum flat, its sides keeler at the base. Postscutellum widely and deeplv depressed laterally at the base. Median segment with a gradualiy rounded slope; it is completely areolated; its base is depressed in the middle: the areola is of an elongated horse-shoe-shape and is oneu behind; its spiracles are curved, linear. A reolet narrowed at the top, 5 -angled; the transverse basal nervure is interstitial; there is the strmp of a nervire on the disco-cubital. Tarsi spinose. The abdomen is short, not much longer than the head and thorax united: the pemiltimate segment is large, longer than the $6^{\text {th }}$; the last is small and is depressed abore; the sides of the segment nroject at the apices and are listinctly separated from the following. The ventral keel is ou the 2nd and 3 rd and less distinctly on the $4^{\text {th }}$; the ovipositor projects and has broad sheaths: the dorsal segments are almost smootli. The antennae in the $\sigma^{7}$ are long and serrate; the punctuation on the abdomen is close and distinct.

The dilated antemme in $Q$, serrate in $O^{7}$. the median segment depressed at the base, and the menelosed areola refer this genus to the .lapmini. In Aslonend's arrangement it would come in near Protichnenmon (cf. Bull. U. S. Nat. Mus. XXIII, 15).
L. spinitarsis sp. not. ત1 O Nigra, Alavomaenlatu: plemris apiceque metronoti late fano-maculatis; pedilus fulvis, coxis tarsisque Alaris; coxis posticis sultus, apice fomormm apiceque tilharum posticarmm mimis; alis lyylinis stigmate nervisque nigris. - Long. 9-10 mm.

## Hab. Khasia Hills (Coll. Rothney).

O Antennae black; the seape and joints $10^{\text {th }}-19$ th clear white beneath; the joints heyonl the middle flattened and dilated: the apical attennated. Head pale yellow: the vertex and front broadly in the centre, the occiput and the onterside of the outer eye orbits, black: smooth and shining: the face in the middle ohscurelr punctured and very sparselv covered with short, white puhescence. Mandibles pallid yellow; their teeth black. Thorax black. shining: the edge of the pronotum. two lines in the middle of the mesonntum, the scutellar keels, the sides of the scutellum - broadly behind -
the post-scutellum, the sides of the apical slope of the metanotum, the lower edge of the proplenrae, the tubercles. the mesoplenrae from shortly below the middle. the parts below the hind wings, an irregnlar spot immediately behind the spiracles and a large oblique mark immerliately above the hinder enxae, vellow. Mesonotmm elosely, but not very strongly punctured; the sentellom is only very sparsely punctured. Median segment, except in the middle, at the hase - the areola and its neighbourhood - closely and distinetly punctured; the posterior median area elosely, transverse!y striated: the areola is very smooth and shining. Proplenrae almost immuntate: the meso- elosely punctured, except on the top behind: the hinder furrow is cremulated: the meta- has the apical half sparsely punctured. Leers fulvons; the 4 front coxae and trochanters pallid yellow ; the hinder coxae black, broadly vellow in the mildie above and narrowly at the apex helow; the apical third of the hinder femora, the base of the hinder tihiae narrowly, their apor more broally and the extreme hase of the metatargus. hlack: the rest of the himder tarsi white. Abdomen blaek; the apiees of all the segments pale yellow. the yellow banils narrowed in the middle: on the $55^{\text {th }}$ segment it is only vellow on the sides: on the $6^{\text {th }}$ it is very narrow: and the 7 th and 8 th are entirelv pale yellow ; the post-netiole is elosely striated in the middle: the middle of the $2^{n d}$ at the hase is mueh more strongly striated. Gastrocoeli large. deen. striated romd the sides at the hase: the ventral fold and the sides aul apices of the 2 nd and 3 rd segments are pale yellow.

## III. Phacogenini.

## 19. Pagarenes gen. nov.

Metathoracie spiracles small, oval, almost circular. Median segment depressed in the midlle at the hase areolated: the areola large, romded and clearly separated hehind. Head hardly developel behind the eyes which reach the ontre edge; the occipnt is transverse. Antennae longer than the body, dilated and compressed beyond the middle and ringed with white. Maudibles with a small blunt subapical tooth, not projecting or separated behind, and a large apical one. Clymus romully ronvex; its apex transverse, with the sides romulowl: hehind it is separated from the face by a shallow, indistinct depression: the foveae are large and deep. Malar space simall. Scutellum convex, its sides stontly keeled to the apex. Areolet 4 -angled, narrowed above; the transverse hasal nervure is interstitial ; there is no nervare on the disco-cubital.

Legs stout; the tarsi spinose; the hinder coxae large, projecting backwards at the base. Ablomen with 7 dorsal segments ; the apex is not very sharply pointed ; the ventral keel is on segments 2, 3 and 4. Gastrocoeli large, deep.

Belongs to the Phaeogenini; and. in Ashmearl's arrangement. comes uearest to Isclunus, which is readily known from it by the head being largely developed behind the eyes.
P. erythropus sp. nov. or Niger, fluvo-macnlatns: apice metanoti late fluvo; pedilm.s rufis, coxis trochanterilunsque anterioribus flavis; coxis et trochunteribus postivis apicenue femornm posticorum niyris; alis hyalinis, stiymate testaceo, nervis fuscis. - Long.: 7 mm.

Hab . Sikhim.
Antenuae longer than the body, the scape and points 10-14 beneath white; the basal joints of the flagellum bare, the apical covered with a microseopie down. Heall black, the face, upper half of the clypens, the labrim, the imer eye orbits, the lower half of the outer, the mandibles except at the apex, and the palpi, pallid gellow. Face and clypens closely and distinctly punctured and covered with white pirbescence; on the middle of the face is a bellshaped back mark. narrow at the top and becoming gradnally wider to the elypeal fovene; the vertex is mimutely, and not very distinctly, punctnred. The long palpi are lemon-yellow. Thorax black: the unper and lower edges of the prothorax, the sentellum, post-scutellim, the apical slope of the me lian segment, the yellow extending laterally to the end of the spiracular areae, two spots nuler the hinder wings, a mark immediately above the middle coxae broadest on the top, and a small, somewhat similar. mark over the hinder coxae, lemon-vellow. Mesonotnm closely, miformly and rather strongly punctured; the scutellom is not so closely pnetured and is covered with longish fuscons hair: the post-sentellom is impunctate. Median segment closely rogosely muctured; the basal depression is smooth and shining; the areola is nearly twice longer than wile: and it is stoutly irregularly reticnlaterl; the apical slope of the segment is also irregularly reticnlater. Plenrae closely and distinctly punctured; the lower part of the propleurae is smooth and shining; the apex is cremmated. Wings clear hyaline: the stigma testaceous; the nervures black. Legs rnfons: the 4 anterior coxae and trochanters vellow: the hinder coxae black, broadly yellow above; the trochanters black, the basal joint vellowish above : the apex of the femora liack. Abdomen black: the apices of the basal 3 sigments broadly and the apical 2 entirely yellow: the hasal 3 ventral segments are broadly bauded with pale yellow. (To be contiuned.)

## ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database
Digitale Literatur/Digital Literature
Zeitschrift/Journal: Zeitschrift für systematische Hymenopterologie und Dipterologie

Jahr/Year: 1903
Band/Volume: 3
Autor(en)/Author(s): Cameron Peter
Artikel/Article: Descriptions of New Genera and Species of Hymenoptera from India. 177-184

